

Wireless E-911 Services Board

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FCC Action

- Original Notice of Proposed Rule Making – 94-102
- First Report and Order – 96-264 – September 1996
- Two additional Report and Orders
- Three Memorandum of Opinion and Order

FCC 94-102 Required

- Complete all calls to 911 regardless of billing.
- Phase I Call back number Cell site location.
- Phase II Actual location of caller within margin for error

FCC Requirements

- PSAP must make a request to the CMRS provider.
- PSAP must be able to use the data.
 - Richardson, Texas
- A cost recovery mechanism must be in place for the PSAP.
- Phase I must be provided within 6 months of a request by the PSAP.

- [illegible]

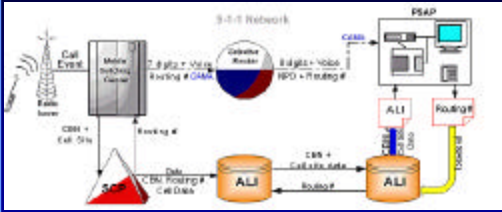
Phase I

- Two methods for data provision:
 - Call path Associated Signaling (CAS) – The voice call and the call back number data follow the same path.
 - Non-Call path Associated Signaling (NCAS) – The the call back number data follows a different path than the voice call to get to the PSAP.

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[illegible]

Non-Call Path Associated Signaling (NCAS)



Phase II - Location Technology

- Handset based solution
 - GPS
- Network based solution
 - Time Distance of Arrival
 - Angle of Arrival
 - RF Fingerprinting
- Hybrid solution

- [illegible]

Phase II - Accuracy Requirements

- Handset Based Solution
 - 50 meters / 67% of the calls
 - 150 meters / 95% of the calls
- Network Based Solution
 - 100 meters / 67% of the calls
 - 300 meters / 95% of the calls

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Phase II - Timeline

- Announce Technology by November 9
- Handset based
 - Begin selling by October 2001 (regardless of request).
 - 25% of new by December 31, 2001.
 - 50% by June 30, 2002.
 - 100% by December 31, 2002.
 - Full penetration (95%) by December 31, 2005.
- Network based
 - 50% of area in 6 months of request.
 - 100% within 18 months.

Virginia Legislative History

- 1998 – House Bill 1331 establishes the Wireless Fund and creates the first Board.
- 1998 – House Joint Resolution 215 directed the Crime Commission to study Enhanced 9-1-1.
- 1999 – Budget amendment directs 9 jurisdictions to begin taking wireless 9-1-1 calls.
- 2000 – Senate Bill 148 restructures program.
- 2001 - House Bill 1611 excludes localities with less than 50% wireless coverage and no wireline surcharge from requirement to implement E-911.

House Bill 1331

- Established a \$0.75 surcharge on wireless telephone bills.
- Established Wireless E-911 Services Board.
- Allowed PSAPs and CMRS Providers to seek “reasonable” and “direct” costs for the provision of wireless E-911 Phase I and II.
- Required “true-up” process

Senate Bill 148

- Expanded the membership of the Board and changed Chairman.
- Established deadlines for the provision of statewide wireline E-911 and wireless 911.
- Gave responsibility for wireline funding to Wireless Board.
- Established a subcommittee to review CMRS submissions (FOIA exemption).

Senate Bill 148 (continued)

- Created the Division of Public Safety Communications.
- Staff for the Board Technical assistance to localities.
- Capped the wireline surcharge at \$3.00.
- Requires yearly reporting to General Assembly.
- \$1.4 million appropriation for wireline.

Board Membership

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| • N. Jerry Simonoff
Chairman | • Julian Taliaferro
Fire Chief Rep. |
| • Jim McDonnell
Vice-Chairman | • Sheriff Ron Oakes
Sheriff Rep. |
| • PSAP Rep. | • Captain John Furlough
State Police Rep. |
| • Bill Landside
Treasurer | • Ralph Jones
DEM Rep. |
| • Tom Hanson
PSAP Rep. | • Robert Woltz
LEC Rep. |
| • Terry Hall
EMS Rep. | • Edward Coglio
PCS Rep. |
| • Melvin Breeden
Local Financial Officer Rep. | • Dave Apperson
Cellular Rep. |
| • Chief Henry Stanley
Police Chief Rep. | |

Board Actions

- Established PSAP Guidelines for FY00/FY01/FY02.
 - 22 – PSAPs submitted requests in FY00 totaling approximately \$4.4 million.
 - 35 – PSAPs submitted requests in FY01 totaling approximately \$5.6 million.
 - 64 – PSAPs submitted requests in FY02 totaling approximately \$8 million.
- Conducted FY2000 True-up.

Board Action (continued)

- Established Guidelines for CMRS submissions.
 - Most based on capitation rate (\$0.15 - \$0.304)
 - Non-recurring as well as recurring.
 - Submit certified subscriber count each quarter to Chair of payment.
- Specific information about the submission was confidential and could not be shared with the Board.

Board Action (continued)

- Provided two status reports to the General Assembly.
- Heard presentations from every major wireless provider on Phase I status and Phase II plans. Will consider action at June 13th meeting.
- Currently considering Phase II guidelines for Phase II funding.

Phase II PSAP Funding

Mapping

• Aerial Photography (Initial effort)	Wireless percentage of cost or higher amount for start up such as composite index or fixed amount.	100% of cost - Should be conducted in a statewide program.	Composite index or Statewide program (whichever is more economical).
• Aerial Photography (Repeated)	No funding.	Wireless percentage of cost.	No funding unless statewide program.
• Street Centerline (Initial effort)	Wireless percentage of cost or higher amount for start up such as composite index or fixed amount.	100% of cost - Should be conducted in a statewide program.	Composite index or Statewide program (whichever is more economical).
• Street Centerline (On-going)	No funding.	Wireless percentage of cost.	No funding.
• Building and Parcel (Initial effort)	No funding.	100% - Should be conducted in a statewide program.	No funding.
• Building and Parcel (On-going)	No funding.	Wireless percentage of cost.	No funding.
• P.A.P. Personnel for Maintenance	Wireless percentage of cost.	Wireless percentage of cost or 100% for first year of start-up.	Wireless percentage of cost.
• Addressing Equipment	Not discussed.	Not discussed.	Wireless percentage of cost.

Phase II PSAP Funding

Display System

• CPE-based (Initial purchase)	100% of total cost to implement (configuration, hardware, installation).	100% of total cost to implement (configuration, hardware, installation).	100% of total cost to implement (configuration, hardware, installation).
• CPE-based (Replacement)	Wireless percentage of cost.	Wireless percentage of cost.	Wireless percentage of cost.
• CPE-based (Maintenance)	Wireless percentage of cost.	Wireless percentage of cost.	Wireless percentage of cost.

Phase II PSAP Funding

Display System (Continued)

• CAD-based (Interface)	100% of cost of interface.	100% of cost of interface.	100% of cost of interface.
• CAD-based (Addition of Mapping)	100% of total cost to implement (configuration, hardware, installation).	100% of total cost to implement (configuration, hardware, installation).	100% of total cost to implement (configuration, hardware, installation).
• CAD-based (Totally new CAD system)	100% of total cost to implement (configuration, hardware, installation).	100% of the cost of the interface and mapping components only (if it cannot be split out of the cost of the system, then no funding available).	100% of the cost of the interface and mapping components plus the wireless percentage of the rest of the cost of the system.
• CAD-based (Replacement of entire CAD system)	Wireless percentage of total cost to implement (configuration, hardware, installation).	Wireless percentage of the cost of the interface and mapping components only.	Wireless percentage of the cost of the interface and mapping components only.
• CAD-based (Maintenance)	Wireless percentage of cost.	Wireless percentage of cost.	No funding.

Phase II PSAP Funding

Display System (Continued)

• Separate system (Initial purchase)	100% of total cost to implement (conflation, hardware, installation).	100% of total cost to implement (conflation, hardware, installation).	100% of total cost to implement (conflation, hardware, installation).
• Separate system (Replacement)	Wireless percentage of cost.	Wireless percentage of cost.	Wireless percentage of cost.
• Separate system (Maintenance)	Wireless percentage of cost.	Wireless percentage of cost.	Wireless percentage of cost.
• Service Provider based	100% of total cost.	100% of total cost.	100% of total cost if no other use than wireless E-911.

Phase II PSAP Funding

Other Comments

<ul style="list-style-type: none"> Request a statewide study of Phase II implementation options to include a rider for localities to acquire consulting services for Phase II project management. All costs for study and consulting service to be paid by the Wireless Fund. 	<ul style="list-style-type: none"> Request a statewide standard for small, medium and large PSAPs and fund different items at different levels for each type of agency and upgrade systems if a PSAP grows from one size to another. Request consideration of needs based funding based on the needs of the PSAP and the locality's ability to fund (possible use of composite index). 	<ul style="list-style-type: none"> Recommend statewide study of Phase II implementation options to include a rider for localities to acquire consulting services for Phase II project management. All costs for study and consulting service to be paid by the Wireless Fund. Do NOT a statewide standard for small, medium and large PSAPs and fund different items at different levels for each type of agency. Do NOT recommend consideration of needs based funding based on the needs of the PSAP and the locality's ability to fund (possible use of composite index).
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Future Challenges

- PBX systems.
- Automatic Collision Notification (ACN).
- Competitive Local Exchange Carriers (CLEC).
- Number Portability (LNP & GNP).
- Voice over IP (challenge and opportunity).